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09/535,890	03/27/2000	Pankaj K. Jha	0325.00346	3976

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EXAMINER

KWOH, JASPER C

ART UNIT PAPER NUMBER

2663

DATE MAILED: 07/16/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/535,890

Applicant(s)

JHA, PANKAJ K.

Examiner

Jasper Kwoh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,4,5</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Drawings

1. Figures 1-8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A frame is a data structure and is not a process, machine, manufacture or composition of matter, or improvements thereof.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Regarding claim 10, the phrase "other appropriate packet data types" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "other appropriate packet data types"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05. It is unclear which data types are also being included in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 3-8, 12-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Russell et al. (US006584118B1).

Regarding claim 1, Russell et al. discloses a frame configured to be transmitted on a network (i.e. col. 5, ll. 23-31; the Ethernet frames are transported on a SDH network) and store one or more data packets in a plurality of channels (i.e. col. 6, ll. 9-13; Ethernet carries IP packets in the SDH virtual containers which are equivalent to channels), wherein a first one or more of said plurality of channels is configured to store

one or more fragments of said one or more data packets (IP packets/datagrams are inherently could be fragments that is being transmitted).

Regarding claims 3-4, Russell et al. discloses a SONET/SDH fiber optic network (i.e. col. 5, ll. 23-31; the Ethernet frames are transported on a SDH fiber optic network).

Regarding claims 5-7, Russell et al. discloses one or more offset locators (i.e. fig. 9, 905); locator identifies the next fragment (i.e. col. 9, ll. 59-63; fragments are identified by means of pointers) and one or more trailer locators configured to identify an end of data packet (i.e. col. 10, ll. 9-12; pointer points to the end of frame within the user data portion).

Regarding claim 8, Russell et al. discloses fixed bandwidth channels (i.e. col. 9, ll. 43; all the channels are VC-3 channels which are the same bandwidth).

Regarding claim 12, Russell et al. discloses data packets are selected on a packet-by-packet basis (i.e. col. 10, ll. 9-12; each frame is read independently).

Regarding claims 13 and 20, Russell et al. discloses an apparatus and method comprising receiving and/or transmitting one or more of a plurality of frames (i.e. fig. 2, col. 5, ll. 23-31; the Ethernet frames are transported on a SDH network); configuring each frame to store one or more packets in a plurality of channels (i.e. col. 6, ll. 9-13; Ethernet carries IP packets in the SDH virtual containers which are equivalent to channels); and configuring the channels to store one or more fragments of the one or more packets (Datagram inherently could be fragments), each separated and linked by an offset pointer (i.e. fig. 9, 905; col. 10, ll. 9-13).

Regarding claim 14, Russell et al. discloses data from each of a number of source channels is dynamically allocated in response to bandwidth demands (i.e. col. 10, ll. 24-26, virtual container is scalable according to data rate).

Regarding 15-17, Russell et al. discloses each of the packets comprises an offset locator configured to point to a next fragment; header locators to identify the next fragment; and trailer to identify an end of the packet (i.e. col. 10, ll. 9-13).

Regarding claim 18, Russell et al. discloses fixed bandwidth channels (i.e. col. 9, ll. 43; all the channels are VC-3 channels which are the same bandwidth).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell et al.

Regarding claim 2, Russell et al. teaches that the packets could also be constant length such as cells (i.e. col. 5, ll. 60-61) and telecom data bandwidth such as E1 has a fix bandwidth of 2Mbps/s (i.e. TABLE 1). Russell et al. does not specifically disclose storing only complete packets from a fixed bandwidth source in a second channel. However, it would have been obvious to an ordinary person skilled in the art at the time of the invention to store complete cell in the Ethernet frame form a constant source such as E1. Therefore, it would have been obvious to an ordinary person skilled in the art at

the time of the invention to include from a fixed bandwidth source as taught by TABLE 1 with a second channel to store packets in order to adjust from one bandwidth to another to properly transmit on the new network.

Regarding claim 10, Russell et al. discloses that the packet could be packets of indeterminate length such as IP or constant length such as cells (i.e. col. 5, ll. 60-61). However, Russell et al. does not specifically disclose that the data packet is selected from a group consisting of IP, POS, PPP, ATM, G.702-based PDH, SRP, frame relay, and other appropriate packets. However, all those formats are standard protocol formats. Therefore, it would have been obvious to an ordinary person skilled in the art at the time of the invention to include selecting those appropriate standard formatted packets with the frame of Russell et al. in order to increase scalability and compatibility by allowing the frame of Russell to function with other standard protocol systems.

Regarding claim 11, Russell et al. discloses a ring network and non-SONET (i.e. fig. 1, SDH). Russell et al does not specifically disclose point-to-point WDM. However, WDM is old and notoriously well known. Therefore, it would have been obvious to an ordinary person skilled in the art at the time of the invention to make the SDH network WDM in order to increase the amount of channels available to the users.

11. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell et al. in view of Ramfelt et al (US005946315A).

Russell et al. discloses payload including a partial data load (Datagram inherently could be fragments), but not specifically disclose reloading with a partial data load.

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However, Ramfelt et al. teaches that slots in the frame could be reloaded (i.e. col. 10, ll. 48-52, slot reuse).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasper Kwoh whose telephone number is (703) 305-0101. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703)308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.



JK
July 12, 2003

Jasper Kwoh
Examiner
Art Unit 2663



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
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